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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,842	01/30/2004	Yasuyuki Higashiura	040033	4101

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KRATZ, QUINTOS & HANSON, LLP
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WASHINGTON, DC 20005

EXAMINER

KIM, JUNG W

ART UNIT	PAPER NUMBER
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2132

MAIL DATE	DELIVERY MODE
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07/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/767,842

Applicant(s)

HIGASHIURA ET AL.

Examiner

Jung Kim

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacment drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date see enclosed.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-21 are pending.

Information Disclosure Statement

2. The IDS submitted on 1/30/04 have been considered. An initialed copy is enclosed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-5, 7-10, 12, 14, 15 and 18-21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention
5. Claims 3-5 recite the limitation "attaching the public key-based electronic signature created at access to the electronic signature" or "attaching the public key-based electronic signature created at access to the electronic data." The claims appear to be defining a second public key-based electronic signature separate from the electronic signature defined in the independent claims, however there is insufficient antecedent basis for the limitation.
6. Claims 3-5, 12, 14 and 15 recite the limitation "said electronic signature." However, the claims appear to define more than one electronic signature.

Art Unit: 2132

7. Claims 7-10 and 18-21 recite the limitations "said public key certificate" or "the certificate." There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Bacha et al. USPN 6,950,943 (hereinafter Bacha).

10. As per claims 1-5, Bacha discloses an electronic data storage system comprising:

a. a file device for storing at least electronic data (fig. 2, reference no. 204);
and

b. a data processing unit which generates check codes for detecting falsification respectively for said electronic data and a public key-based electronic signature using a secret encryption method and/or an encryption key when the electronic data is registered (Col. 5:60-65; 6:12-15; 6:41-45; 7:1-3), stores said

electronic data, said public key-based electronic signature, and said respective check codes (7:9-12), respectively verifies the validity of said stored electronic data and said electronic signature using said check codes attached the stored electronic data and said electronic signature when said electronic data is output, and then accesses said electronic data and said electronic signature; (7:12-25; 8:15-54)

c. wherein said data processing unit outputs said electronic data with attaching the public key-based electronic signature created at access to the electronic signature at registration to be accessed after verifying the validity of said electronic data and said electronic signature (8:37-39).

11. As per claims 11-15, they are claims corresponding to claims 1-5, and they do not teach or define above the information claimed in claims 1-5. Therefore, claims 11-15 are rejected as being anticipated by Bacha for the same reasons set forth in the rejections of claims 1-5.

12. Claims 1-5 are rejected under 35 USC 102(b) as being anticipated by Nakahara Japanese patent application publication no. 2000-059353 (hereinafter Nakahara).

13. As per claims 1-5, Nakahara discloses a file device for storing at least electronic data; and a data processing unit which generates check codes for detecting falsification respectively for said electronic data and a public key-based electronic signature using a

Art Unit: 2132

secret encryption method and/or an encryption key when the electronic data is registered, stores said electronic data, said public key-based electronic signature, and said respective check codes, respectively verifies the validity of said stored electronic data and said electronic signature using said check codes attached the stored electronic data and said electronic signature when said electronic data is output, and then accesses said electronic data and said electronic signature; wherein said data processing unit outputs said electronic data with attaching the public key-based electronic signature created at access to the electronic signature at registration to be accessed after verifying the validity of said electronic data and said electronic signature (Abstract: "Solution").

14. As per claims 11-15, they are claims corresponding to claims 1-5, and they do not teach or define above the information claimed in claims 1-5. Therefore, claims 11-15 are rejected as being anticipated by Nakahara for the same reasons set forth in the rejections of claims 1-5.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacha in view of Bisbee et al. USPN 5,748,738 (hereinafter Bisbee).

17. As per claims 6-10, the rejections of claims 1-5 under 35 USC 102(e) as being anticipated by Bacha are incorporated herein. Bacha does not expressly disclose, wherein said data processing unit stores a certificate of the public key with which said electronic signature was created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit stores the certificate of the public key with which said electronic signature is created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit creates a pair of said public key and said secret key according to the request for key creation, issues the request of issuing said public key certificate to a CA office, acquires said public key certificate, and stores said acquired public key certificate in said file device. Bisbee discloses a system and method for electronic storage of authenticated documents, wherein a Certificate authority issues a public key certificate to various subscribers to generate public key signatures, wherein the certificates are in accordance with X.509, wherein the certificates include an expiration period field to indicate the expiration of the certificate; wherein a first digital signature is generated from an electronic document using a first private key from a first certificate,

and the first digital signature and first certificate are attached to the electronic document; whereupon a second digital signature is generated from the electronic document using a second private key from a second certificate, and the second digital signature and second certificate are attached to the electronic document then stored in an Authentication Center once the first digital signature is validated. (5:15-55; 7:15-22; 9:27-10:7; 10:50-64) It would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Bacha to include the features wherein said data processing unit stores a certificate of the public key with which said electronic signature was created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit stores the certificate of the public key with which said electronic signature is created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit creates a pair of said public key and said secret key according to the request for key creation, issues the request of issuing said public key certificate to a CA office, acquires said public key certificate, and stores said acquired public key certificate in said file device. One would be motivated to do so to provide simple and efficient means to provide the certified public key used to verify the public key signature of the electronic document as known to one of ordinary skill in the art and as taught by Bisbee. Col. 2:64-3:11. The aforementioned cover the limitations of claims 6-10.

18. As per claims 16-21, they are claims corresponding to claims 6-10, and they do not teach or define above the information claimed in claims 6-10. Therefore, claims 16-21 are rejected as being unpatentable over Bacha in view of Bisbee for the same reasons set forth in the rejections of claims 6-10.

19. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara in view of Bisbee et al. USPN 5,748,738 (hereinafter Bisbee).

20. As per claims 6-10, the rejections of claims 1-5 under 35 USC 102(b) as being anticipated by Nakahara are incorporated herein. Nakahara does not expressly disclose, wherein said data processing unit stores a certificate of the public key with which said electronic signature was created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit stores the certificate of the public key with which said electronic signature is created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit creates a pair of said public key and said secret key according to the request for key creation, issues the request of issuing said public key certificate to a CA office, acquires said public key certificate, and stores said acquired public key

certificate in said file device. Bisbee discloses a system and method for electronic storage of authenticated documents, wherein a Certificate authority issues a public key certificate to various subscribers to generate public key signatures, wherein the certificates are in accordance with X.509, wherein the certificates include an expiration period field to indicate the expiration of the certificate; wherein a first digital signature is generated from an electronic document using a first private key from a first certificate, and the first digital signature and first certificate are attached to the electronic document; whereupon a second digital signature is generated from the electronic document using a second private key from a second certificate, and the second digital signature and second certificate are attached to the electronic document then stored in an Authentication Center once the first digital signature is validated. (Col. 5:15-55; 7:15-22; 9:27-10:7; 10:50-64) It would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Nakahara to include the features wherein said data processing unit stores a certificate of the public key with which said electronic signature was created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit stores the certificate of the public key with which said electronic signature is created, simultaneously along with said electronic signature, when said electronic signature is created; wherein said data processing unit stores or outputs the expiration information of said public key certificate simultaneously; wherein said data processing unit creates a pair of said public key and said secret key according to the

request for key creation, issues the request of issuing said public key certificate to a CA office, acquires said public key certificate, and stores said acquired public key certificate in said file device. One would be motivated to do so to provide simple and efficient means to provide the certified public key used to verify the public key signature of the electronic document as known to one of ordinary skill in the art and as taught by Bisbee. Col. 2:64-3:11. The aforementioned cover the limitations of claims 6-10.

21. As per claims 16-21, they are claims corresponding to claims 6-10, and they do not teach or define above the information claimed in claims 6-10. Therefore, claims 16-21 are rejected as being unpatentable over Nakahara in view of Bisbee for the same reasons set forth in the rejections of claims 6-10.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jung Kim
Examiner
AU 2132
July 6, 2007